

Midterm practice: Factor difference of squares

First factor any common factors. Then, identify the difference of squares to help factor the expression.

1. Fully factor $72x^2 - 2$
2. Fully factor $18x^2 - 2$
3. Fully factor $125x^2 - 5$
4. Fully factor $8x^2 - 2$
5. Fully factor $16x^2 - 4$
6. Fully factor $20x^2 - 5$
7. Fully factor $x^2 - 16$
8. Fully factor $3x^2 - 75$
9. Fully factor $75x^2 - 3$
10. Fully factor $80x^2 - 5$
11. Fully factor $50x^2 - 2$
12. Fully factor $2x^2 - 72$
13. Fully factor $x^2 - 81$
14. Fully factor $196x^2 - 4$
15. Fully factor $12x^2 - 3$
16. Fully factor $16x^2 - 1$
17. Fully factor $5x^2 - 45$
18. Fully factor $108x^2 - 3$
19. Fully factor $162x^2 - 2$
20. Fully factor $x^2 - 4$

$$4. \quad 2(2x+1)(2x-1)$$

$$12. \quad 2(x+6)(x-6)$$

$$2. \quad 2(3x+1)(3x-1)$$

$$19. \quad 2(9x+1)(9x-1)$$

$$5. \quad 4(2x+1)(2x-1)$$

$$6. \quad 5(2x+1)(2x-1)$$

$$17. \quad 5(x+3)(x-3)$$

$$7. \quad (x+4)(x-4)$$

$$11. \quad 2(5x+1)(5x-1)$$

$$18. \quad 3(6x+1)(6x-1)$$

$$16. \quad (4x+1)(4x-1)$$

$$10. \quad 5(4x+1)(4x-1)$$

$$1. \quad 2(6x+1)(6x-1)$$

$$14. \quad 4(7x+1)(7x-1)$$

$$15. \quad 3(2x+1)(2x-1)$$

$$13. \quad (x+9)(x-9)$$

$$9. \quad 3(5x+1)(5x-1)$$

$$20. \quad (x+2)(x-2)$$

$$3. \quad 5(5x+1)(5x-1)$$

$$8. \quad 3(x+5)(x-5)$$